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## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 10

<b>Complete if Known</b>	
Application Number	09/981,312
Filing Date	10/15/2001
First Named Inventor	Mitchell A. Avery
Art Unit	1614
Examiner Name	Andrea D. Souza Small
Attorney Docket Number	1786

**U. S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		WO 98/54966	12/10/1998	Merck & CO, Inc		
		WO 99/02514	01/21/1999	Bristol Meyers Squibb		
		WO 99/67253	12/29/1999	Novartis AG et al.		
		WO 99/67252	12/29/1999	Novartis AG et al.		
		WO 99/66028	12/23/1999	Novartis AG et al.		
		WO 99/59985	11/25/1999	Novartis AG et al.		

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Sheet 2 of 10

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Application Number	09/981,312
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Art Unit	1614
Examiner Name	Andrea D. Souza Small
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		WO 99/54330	10/28/1999	Bristol Meyers Squibb	
		WO 99/54318	10/28/1999	Bristol Meyers Squibb	
		WO 99/43653	09/02/1999	Sloan Kettering	
		WO 98/25929	06/18/1998	Novartis AG et al.	
		WO 99/42602	08/26/1999	Novartis AG et al.	
		WO 02/08440	01/31/2002	Kosan Bioscience	

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Sheet 3 of 10

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Art Unit	1614
Examiner Name	Andrea D. Souza Small
Attorney Docket Number	1786

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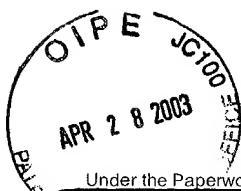
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		WO 01/73103	10/04/2001	Bristol Meyers Squibb	
		WO 01/70716	09/27/2001	Bristol Meyers Squibb	

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4

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Filing Date	10/15/2001
First Named Inventor	Michell A. Avery
Art Unit	1614
Examiner Name	Andrea D. Souza Small

Attorney Docket Number 1786

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		HOFLE, G.; GLASER, NO.; LEIBOLD, T.; SEFKOW, M. Epothilone A-D and their Thiazole-Modified Analogs as Novel Anticancer Agents. Pure and Applied Chemistry 1999, Volume 71, Pages 2019-2024.	
		ZHU, B.; PANEK, J.S. Total Synthesis of Epothilone A. Organic Letters 2000, Vol. 2, Pages 2575-2578.	
		STACHEL, S.J.; CHAPPELL, M.D.; LEE, C.B.; DANISHEFSKY, S.J.; CHOU, T.C.; HE, L.; HORWITZ, S.B. On the Total Synthesis and Preliminary Biological Evaluations of 15(R) and 15(S) Aza-dEpoB: A Mitsunobu Inversion at C15 in Pre-Epothilone Fragments. Organic Letters 2000, Vol. 39, Pages 1637-1639	
		SAWADA, D.; SHIBASAKI, M. Enantioselective Total Synthesis of Epothilone A Using a Multifunctional Asymmetric Catalyses. Angewandte Chemie, International Edition 2000, Vol. 39, Pages 209-213.	
		KALESSE, M.; QUITSCHALLE, M.; CLAUS, E.; GERLACH, K.; PAHL, A.; MEYER, H.H. The Formal Total Synthesis of Epothilone A. European Journal of Organic Chemistry 1999, Pages 2817-2823.	
		WHITE, J.D.; SUNDERMANN, K.F.; CARTER, R.G. Improved Synthesis of Epothilone B Employing Alkylation of an Alkyne for Assembly of Subunits. Organic Letters 1999, Vol. 1, Pages 1431-1434.	
		SCHINZER, D.; BAUER, A.; SCHIEBER, J. Synthesis of (-)-Epothilone B. Chemistry--A European Journal 1999, Vol. 5, Pages 2492-2500.	
		NICOLAOU, K.C.; HEPWORTH, D.; FINLAY, M.R.V.; PAUL KING, N.; WERSCHKUN, B.; BIGOT, A. Synthesis of 16-Desmethylepothilone B: Improved Methodology for Rapid, Highly Selective and Convergent Construction of Epothilone B and and Analogs. Chemical Communications (Cambridge) 1999, Pages 519-520.	

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Sheet

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First Named Inventor	Mitchell A. Avery
Art Unit	1614
Examiner Name	Andrea D. Souza Small
Attorney Docket Number	1786

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		TAYLOR, R.E.; GALVIN, G.M.; HILFIKER, K.A.; CHEN, Y. A Formal Synthesis of Epothilone A: Enantioselective Preparation of the C1-C6 and C7-C12 Fragments. <i>Journal of Organic Chemistry</i> 1998, Vol. 63, Pages 9580-9583.	
		BALOG, A.; HARRIS, C.; SAVIN, K.; ZHANG, X.-G.; CHOU, T.C.; DANISHEFSKY, S.J. A Novel Aldol Condensation with 2-Methyl-4-Pentenal and its Application to an Improved Total Synthesis of Epothilone B. <i>Angewandte Chemie, International Edition</i> 1998, Vol. 37, Pages 2675-2678.	
		NICOLAOU, K.C.; ROSCHANGAR, F.; VOURLOUMIS, D. Chemical Biology of Epothilones. <i>Angewandte Chemie, International Edition</i> 1998, Vol. 37, Pages 2014-2045.	
		SCHINZER, D.; BAUER, A.; SCHIEBER, J. Synthesis of Epothilones, Stereoselective Routes to Epothilone B. <i>Synlett</i> 1998, Pages 861-864.	
		MAY, S.A.; GRIECO, P.A. Total Synthesis of (-)-Epothilone B. <i>Chemical Communications (Cambridge)</i> 1998, Pages 1597-1598.	
		NICOLAOU, K.C.; FINLAY, M.R.V.; NINKOVIC, S.; SARABIA, F. Total Synthesis of 26-Hydroxy-Epothilone B and Related Analogs via a Macrolactonization Based Strategy. <i>Tetrahedron</i> 1998, Vol. 54, Pages 7127-7166.	
		NICOLAOU, K.C.; HE, Y.; ROSCHANGAR, F.; KING, N.P.; VOURLOUMIS, D.; LI, T. Total Synthesis of Epothilone E and Analogs with Modified Side Chains Through the Stille Coupling Reaction. <i>Angewandte Chemie, International Edition</i> 1998, Vol. 37, Pages 84-87.	
		NICOLAOU, K.C.; SARABIA, F.; NINKOVIC, S.; FINLAY, M.R.; BODDY, C.N.C. Probing the Ring Size of Epothilones: Total Synthesis of [14]-, [15]-, [17]-, and [18] Epothilones A. <i>Angewandte Chemie, International Edition</i> 1998, Vol. 37, Pages 81-84.	

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				<b>Art Unit</b>	1614
				<b>Examiner Name</b>	Andrea D. Souza Small
Sheet	6	of	10	Attorney Docket Number	1786

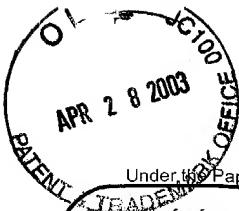
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		NICOLAOU, K.C.; VALLBERG, H.; KING, N.P.; ROSCHANGAR, F.; HE, Y.; VOURLOUMIS, D.; NICOLAOU, C.G. Total Synthesis of Oxazole- and Cyclopropane-Containing Epothilone A Analogs by the Olefin Metathesis Approach. Chemistry--A European Journal 1997, Vol. 3, Pages 1957-1970.	
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		MENG, D.; BERTINATO, P.; BALOG, A.; SU, D.-S.; KAMENECKA, T.; SORENSEN, E.; DANISHEFSKY, S.J. Total Synthesis of Epothilones A and B. Journal of the American Chemical Society 1997, Vol. 119, Pages 10073-10092.	
		NICOLAOU, K.C.; NINKOVIC, S.; SARABIA, F.; VOURLOUMIS, D.; HE, Y.; VALLBERG, H.; FINLAY, M.R.V.; YANG, Z. Total Synthesis of Epothilones A and B via a Macrolactonization-Based Strategy. Journal of the American Chemical Society 1997, Vol. 119, Pages 7974-7991.	
		BALOG, A.; MENG, D.; KAMENECKA, T.; BERTINATO, P.; SU, D.-S.; SORENSEN, E.J.; DANISHEFSKY, S.J. Total Synthesis of (-)-Epothilone A. Angewandte Chemie, International Edition in English, 1996, Vol. 35, Pages 2801-2803.	
		YANG, X.; HE, Y.; VOURLOUMIS, D.; VALLBERG, H.; NICOLAOU, K.C. Total Synthesis of Epothilone A: The Olefin Metathesis Approach. Angewandte Chemie, International Edition in English 1997, Vol. 36, Pages 166-168.	

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Sheet 7 of 10

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		APPENDINO, G.; CASIRAGHI, G. The Synthesis of Epothilones: Highlights from a Year's Race. <i>Chemtracts--Organic Chemistry</i> 1998, Vol. 11, Pages 678-696.	
		BIJOY, P.; AVERY, M.A. Synthetic Studies Directed Towards Epothilone A: Enantioselective Synthesis of a C7-C15 Carboxaldehyde Segment. <i>Tetrahedron Letters</i> 1998, Vol. 39, Pages 209-212.	
		BRABANDER, J.D.; ROSSET, S.; BERNARDELLI, G. Towards a Synthesis of Epothilone A: Rapid Assembly of the C1-C6 and C7-C12 Fragments. <i>Synlett</i> 1997, Pages 824-826.	
		CASADEI, M.A.; GALLI, C.; MANDOLINI, L.; Ring-Closure Reactions. 22. Kinetics of Cyclization of Diethyl (w-Bromoalkyl) Malonates in the Range of 4- to 21-Membered Rings. Role of Ring Strain. <i>Journal of American Chemical Society</i> 1984, Vol. 106, Pages 1051-1056.	
		MORIKAWA, K.; PARK, J.; ANDERSSON, P.G.; HASHIYAMA, T.; SHARPLESS, K.B. Catalytic Asymmetric Dihydroxylation of Tetrasubstituted Olefins. <i>Journal of American Chemical Society</i> 1993, Vol. 115, Pages 8463-8464.	

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		BOLLAG, D.M.; MCQUEENEY, P.A.; ZHU, J.; HENSENS, O.; KOUPAL, L.; LIESCH, J.; GOETZ, M.; LAZARIDES, E.; WOODS, C.M. Epothilones, A New Class of Microtubule-Stabilizing Agents with a Taxol-Like Mechanism of Action.	
		Chemtracts-Organic Chemistry 1998. Vol. 11. Pages 671-677.	
		OJIMA, F.; HABUS, I.; ZHAO, M.; ZUCCO, M.; PARK, Y.H.; SUN, C.M.; BRIGAUD, T. New and Efficient Approaches to the SemiSynthesis of Taxol and its C-13 Side Chain Analogs by Means of B-Lactam Synthon Method. Tetrahedron 1992, Vol. 48, Pages 6985-7012.	
		CHANDRASEKHAR, S.; MOHANTY, P.K.; TAKHI, M. Practical One-Pot Di-O-Silylation and Regioselective Deprotective Oxidation of 1-O-Silyl Ether in 1,2-Diols. Journal of Organic Chemistry 1997. Vol. 62, Pages 2628-2629.	
		TREHAN, I.R.; SINGH, J.; ARORA, A.K.; KAUR, J.; KAD, G.L. Synthesis of Undecan-3-One; (+)-Frontalin; (+)-Endo-, and (+)-Exo- Brevicomin Under Sonochemical Aqueous Conditions. Indian Journal of Chemistry 1995, Vol. 34B, Pages 396-398.	
		KUMAR, G.N.; WALLE, U.K.; WALLET, T. Cytochrome P450 3A-Mediated Human Liver Microsomal Taxol 6a-Hydroxylation. The Journal of Pharmacology and Experimental Therapeutics 1994, Vol. 268, Pages 1160-1165.	
		SCHRODER, M. Osmium Tetraoxide Cis Hydroxylation of Unsaturated Substrates. Chemical Review 1980, Vol. 80, Pages 187-213.	

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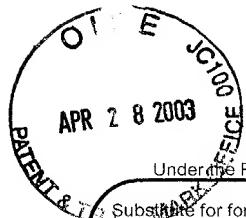
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		HASEHM, M.A.; JUNG, A.; RIES, M.; KIRSCHNING, A. Errata and Addenda 1998, Page 195.	
		DEBRABANDER, J.; ROSSET, S.; BERNADINELLI, G. Errata and Addenda 1997, Page 824.	
		MULZER, J.; MANTOULIDIS, A.; OHLER, E. Total Synthesis of Epothilones B and D. Journal of Organic Chemistry 2000, Vol.65, Pages 7456-7467.	
		BORZILLERI, R.M.; ZHENG, X.; SCHMIDT, R.J.; JOHNSON, J.A.; KIM, S.-H.; DIMARCO, J.D.; FAIRCHILD, C.R.; GOUGOUTAS, J.Z.; LEE, F.Y.F.; LONG, B.H.; VITE, G.D. A Novel Application of a Pd(0)-Catalyzed Nucleophilic Substitution Reaction to the	
		Regio- and Stereoselective Synthesis of Lactam Analogues of the Epothilone Natural Products. Journal of the American Chemical Society 2000, Vol. 122. Pages 8890-8897.	
		ANDERSSON, P.G.; SHARPLESS, K.B. A Dramatic Ligand Effect on the Relative Reactivities of Substituted Alkenes with Osmium Tetroxide. Journal of the American Chemical Society 1993, Vol. 115, Pages 7047-7048.	
		NICOLAOU, K.C.; WINSSINGER, N.; PASTOR, J.; NINKOVIC, S.; SARABIA, F.; HE, Y.; VOURLOUMIS, D.; YANG, Z.; LI, T.; GIANNAKAKOU, P.; HAMEL, E. Synthesis of Epothilones A and B in Solid and Solution Phase. Nature, Vol. 387, May 15, 1997, Pages 268-272.	
		MULZER, J.; KARIG, G.; PUJARIEV, P. A Novel Highly Stereoselective Total Synthesis of Epothilone B and of its (12R, 13R) Acetonide. Tetrahedron Letters 2000, Vol. 41, Pages 7635-7638.	
		MULZER, J. Epothilone B and Its Derivatives as Novel Antitumor Drugs: Total and Partial Synthesis and Biological Evaluation. Monatshefte fur Chemie 2000, Vol. 131, Pages 205-238.	

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Sheet 10 of 10

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Application Number	09/981,312
Filing Date	10/15/2001
First Named Inventor	Mitchell A. Avery
Art Unit	1614
Examiner Name	Andrea D. Souza Small
Attorney Docket Number	1786

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		NICOLAOU, K.C.; HEPWORTH, D.; KING, N.P.; FINLAY, M.R.V.; SCARPELLI, R.; MANUELA, M.; PEREIRA, A.; BOLLMUCK, B.; BIGOT, A.; WERSCHKUN, B.; WINSSINGER, N. Total Synthesis of 16-Desmethyllepothilone B, Epothilone B10.	
		Epothilone F, and Related Side Chain Modified Epothilone B Analogues. European Chemical Journal 2000, Vol. 6, Pages 2783-2800.	

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